

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P28100/WO Kf	FOR FURTHER ACTION	See Form PCT/IPEA/416																								
International application No. PCT/EP2004/003323	International filing date (day/month/year) 29.03.2004	Priority date (day/month/year) 06.06.2003																								
International Patent Classification (IPC) or national classification and IPC																										
Applicant BRUENINGHAUS HYDROMATIK GMBH																										
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> <p>4. This report contains indications relating to the following items:</p> <table border="0"><tr><td><input checked="" type="checkbox"/></td><td>Box No. I</td><td>Basis of the report</td></tr><tr><td><input type="checkbox"/></td><td>Box No. II</td><td>Priority</td></tr><tr><td><input type="checkbox"/></td><td>Box No. III</td><td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td></tr><tr><td><input type="checkbox"/></td><td>Box No. IV</td><td>Lack of unity of invention</td></tr><tr><td><input checked="" type="checkbox"/></td><td>Box No. V</td><td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VI</td><td>Certain documents cited</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VII</td><td>Certain defects in the international application</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VIII</td><td>Certain observations on the international application</td></tr></table>			<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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Date of submission of the demand	Date of completion of this report																									
Name and mailing address of the IPEA/EP	Authorized officer																									
Facsimile No.	Telephone No.																									

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

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Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language _____ which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-12 _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- nos. 1-19 _____ as originally filed/furnished
- nos.* _____ as amended (together with any statement) under Article 19
- nos.* _____ received by this Authority on _____
- nos.* _____ received by this Authority on _____
- ☒ the drawings:
- sheets 1/4-4/4 _____ as originally filed/furnished
- sheets* _____ received by this Authority on _____
- sheets* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	6-19	YES
	Claims	1-5	NO
Inventive step (IS)	Claims	13-17	YES
	Claims	1-12, 18, 19	NO
Industrial applicability (IA)	Claims	1-19	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

D1: DE 39 35 800 A (LINDE AG) 2 May 1991 (1991-05-02)

D2: EP-A-0 922 858 (BRUENINGHAUS HYDROMATIK GMBH) 16 June 1999 (1999-06-16)

D3: US-A-5 226 349 (ALME NATHAN J ET AL) 13 July 1993 (1993-07-13)

D4: US 2002/014149 A1 (FIEBING CARSTEN ET AL) 7 February 2002 (2002-02-07)

As is immediately apparent from the citations, but see below also, the provision of a zero position adjusting device is a standard measure for a person skilled in the art, as is known from the lengthwise-oriented adjusting devices from D1 and D2, or as suggested by D3 and D4.

Novelty of D1 over D1

According to D1, column 3, lines 55-57, every control piston rests against the respectively assigned stop 16 if the inclined disc is not extended. The play-free zero position arises from the adjustment of the two stops (see column 3, line 65). The fact that a contact of the control piston on the stop depends on the pressure in the

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control cylinder has nothing to do with the zero position adjusting device since, when the inclined disc is not extended, there is no pressure in the two cylinders. The requisite novelty is therefore not established.

Novelty of claim 1 over D2

The situation is different in D2 since the pressure in the cylinder determines the zero position. Nonetheless, the zero position adjustment can be considered play-free, since, if there is pressure, the spring does not allow any play. In this regard, it should be noted that the term "play-free" relates only to a momentary state in which there is no space in the mechanical connections such that the components cannot move freely relative to one another. Since the components of the zero position adjusting device according to D2 are pressed together between the pressure chamber and the spring, there can be no play. The fact that in the device as per D2, the pressure can drift, has nothing to do with the freedom for play in the zero position adjustment since, even if the zero position is not maintained, there is no play in the mechanism.

Dependent claims 2-12, 18 and 19 do not appear to contain any additional features which, in combination with the features of any claim to which they refer back, could lead to a subject matter involving an inventive step, because they merely show details that a person skilled in the art would consider standard options with respect to the cited documents.

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In the PCT procedure, the applicant has drawn attention particularly to the inventive step of claim 6.

D3 (figure 1) and D4 (figure 4) show control pistons which function in a similar fashion to those of the present application (claim 6). The screw fastening which brings about a zero position is clearly apparent in both drawings, even if it is not mentioned in D4. A control cylinder such as this constitutes a different alternative, which could be readily used in devices such as D1 or D2 parallel to the cylinder axis.

The special arrangement of the two control pressure chambers as per claim 13 (and subsequent claims) cannot be found in any of the citations. Consequently, the features of claim 13 are neither known nor obvious from the citations.

Industrial applicability is therefore established.